

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) Diode-pumped solid-state laser having at least one intracavity positioned laser crystal ~~(6)~~ having at least one optical axis longitudinally to which at least one pumped-light beam emitted from at least one pumped-light source ~~(7,8)~~ is incident on said laser crystal ~~(6)~~, wherein said pumped-light beam has a beam diameter corresponding to at least 1.25 times the beam cross section of a laser beam forming inside the resonator ~~(R)~~ with the oscillation mode TEM₀₀.

2. (Original) The diode-pumped solid-state laser according to claim 1, wherein the emerging laser beam possesses a beam quality of $M^2 \geq 1.8$.

3. (Currently Amended) The diode-pumped solid-state laser according to ~~claims 1 or 2~~ claim 1, wherein said TEM₀₀ mode beam diameter is defined by the mirror radii of the resonator mirrors ~~(1,2)~~, the length of said resonator, and said intracavity positioning of said laser crystal ~~(6)~~, and said beam diameter of said pumped-light beam is adjustable by means of an imaging optic ~~(14)~~.

4. (Currently Amended) The diode-pumped solid-state laser according to ~~one of the claims 1 to 3~~ claim 1, wherein an intracavity quality switch ~~(3)~~ in form of an acousto-optical or an electro-optical Q-switch is provided.

5. (Currently Amended) The diode-pumped solid-state laser according to ~~one of the claims 1 to 4~~ claim 1, wherein said asymmetrical optical resonator (~~R~~) has a convex-plane, convex-concave or convex-convex resonator construction.

6. (Currently Amended) The diode-pumped solid-state laser according to ~~one of the claims 1 to 5~~ claim 1, wherein said laser crystal (~~6~~) is doped with one or a multiplicity of the following doping substances: Nd, Yb, Cr, Tm, Ho or Er.

7. (Original) The diode-pumped solid-state laser according to claim 6, wherein said laser crystal comprises of the following crystals: Nd:YAG, Nd:YVO₄, Nd:YLF, Nd:GVO₄, Nd:YPO₄, Nd:BEL, Nd:YALO, Nd:LSB, Yb:YAG, Yb:FAB, Cr:LiSAF, Cr:LiCAF, Cr:LiSGAF, Cr:YAG, Tm-Ho:YAG, Tm-Ho:YLF, Er:YAG, Er:YLF or Er:GSGG.

8. (Currently Amended) The diode-pumped solid-state laser according to ~~one of the claims 1 to 6~~ claim 1, wherein at least one of said pumped-light beams has a power of at least 5 Watt, preferably between 10 and 60 Watt.

9. (Currently Amended) Use of the diode-pumped solid-state laser according to ~~one of the claims 1 to 7~~ claim 1 for material processing, preferably for surface processing, such as surface material removal, surface modification, sintering, melting or preferably to process volume material, such as selectively cracking.